We claim:

1. A photo-detector device for in-beam monitoring of a light beam, the device absorbing a proportion of the energy of the beam whilst allowing the remainder of the energy of the beam to pass through.

2. A photodetector device according to claim 1 comprising a photodiode.

3. A photodetector device according to claim 1, in which the photodetector comprises an absorbing layer which produces an output signal dependent on the intensity of the light beam passing through the device.

4. A photodetector device according to claim 3, in which the absorbing layer comprises InGaAsP.

5. A photodetector device according to claim 4, wherein a diffused p-type region is provided in the absorbing layer.

6. A photodetector device according to claim 3, wherein the absorbing layer is provided over a substrate arrangement, and wherein one contact for the device is provided on one side of the substrate opposite the absorbing layer, and another contact for the device is provided over the absorbing layer.

7. A photodetector device according to claim 6, wherein a window is provided in the one contact for the passage of light.

8. A photodetector device according to claim 3, wherein the absorbing layer is provided over a substrate arrangement, and wherein first and second contacts for the device are provided over the absorbing layer.

9. A photodetector device according to claim 4, wherein a well is provided in the absorbing layer, and wherein a diffused p-type region is provided in the side walls of the well for absorbing a peripheral edge of the light beam.

10. A photodetector device according to claim 3, wherein the absorbing layer is provided over a substrate arrangement, and a doped region is provided passing through the substrate for confinement of the signal beam passing through the substrate.

11. A photodetector device according to claim 3, wherein the absorbing layer is provided over a substrate arrangement, and a doped region is provided in one side of the substrate opposite the absorbing layer for focusing the light beam exiting the substrate.

12. A photodetector device according to claim 1 comprising a photoconductor.

13. A fiber power monitor comprising a photodetector device according to claim 1.

14. An optical transmitter unit comprising a photodetector device according to claim 1 for monitoring the transmitter output power.

14. A method of monitoring the intensity of a light beam, comprising:

absorbing a proportion of the energy of the beam using a device positioned in-line with the beam;

using the absorbed light to determine the intensity of the light beam; and

allowing the remainder of the energy of the beam to pass through the device.

15. A method according to claim 14, wherein absorbing a proportion of the energy comprises absorbing a periphery of the light beam and allowing a central region of the light beam to pass substantially unattenuated.